M E A T :

A C O N S U M E R S U R V E Y

O F C H R I S T C H U R C H

H O U S E H O L D S

By

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THE AGRICULTURAL ECONOMICS RESEARCH UNIT

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PREFACE

This study is the second in a series of AERU Research Reports presenting results of Consumer Surveys for various agricultural and horticultural products. In this study meat is the commodity under investigation and Christchurch was the location of the survey.

Expenditure on meat is a major item in the family budget and in recent years a number of factors have operated to influence buying and consumption patterns. Not the least of these factors has been the steady increase in price of all meats and a changing price relativity between types of meat.

It is hoped that the results of the survey will assist the meat trade in planning and executing its marketing operations.

Prof. J.B. Dent
Director

SUMMARY

An interview survey was conducted among 292 randomly selected Christchurch households during late April and early May 1977. The objective of the study was to obtain information about meat consumption and purchasing patterns and factors affecting these patterns. The survey results can be summarised as follows.

CONSUMPTION OF MEAT

Red Meat. Ninety six percent of the households served beef regularly (at least every two weeks), compared with 71 percent who served lamb, 44 percent who served hogget and mutton, and 28 percent who served pork. Steak and chops were more regularly served than roast meats. Beef was served regularly by greater proportions of larger households (3 or more occupants) and households in the younger age groups, while sheep meats were served regularly by a larger proportion of households in the older age groups.

Preferences for Red Meats. Grilling steak was preferred to lamb and pork chops. However, for roast meats, lamb was the most popular, followed by pork and then beef. While the majority of those who had a preference for beef served it regularly, large proportions of those who had a preference for lamb or pork did not serve them regularly.

Other Types of Meat. Sixty-four percent of the households served mince regularly, compared with 74 percent who served smallgoods, 7 percent who served fancy smallgoods and 22 percent who served edible offal. Twenty-eight percent served ham regularly, compared with 61 percent who served bacon, while for the white meats, 54 percent served poultry and 61 percent served fish regularly.

Changes in Consumption. Seventeen percent of the households were eating different types of meat than a year ago, with a swing away from sheep meats and pork towards beef. Greater proportions of those who changed were either larger households and/or in the professional and managerial occupational group and/or the younger age group.

Takeaway Meals. Sixty percent of the households had purchased takeaway meals in the last six months. Larger proportions of these were households with children and/or in the younger age groups. Fish and chips was the most popular takeaway followed by fried chicken.

PURCHASE OF MEAT

Weekly Expenditure. The average weekly expenditure per capita on red meat was estimated to be $2.40, while for other types of meat it was $1.00 and for all meats was $3.40. Households with children had a lower per capita expenditure. There was also a decline in per capita expenditure with the number of occupants in the household for households without children.

Frequency of Purchase. Eighty-two percent of the households usually bought red meat at least once a week. Other types of meat tended to be purchased less regularly, with only 34 percent of those who bought poultry buying it at least once a week.

Outlet Used. The private butcher had 42 percent of the share of purchases for red meat, compared with 13 percent for chain butchers and 25 percent for supermarkets, with 14 percent of households using both supermarkets and butchers. For all the other types of meat except edible offal, the supermarkets had a greater share of the purchases.

There was a tendency for households in the younger age group to buy meat at supermarkets, with the middle aged group using chain butchers and the older age group using private butchers.

Attitudes. A larger proportion of those buying meat at butchers considered "handiness to home" and "personal service given" to be important compared with those who shopped at other outlets, while a larger proportion of those shopping at supermarkets considered "cheaper prices" to be important compared with those who shopped at other outlets.

Pre-Wrapped Meat. Only 28 percent of the respondents said they considered it an advantage to buy meat in a pre-wrapped plastic pack. Of those in favour "convenience" and "ease of handling" were seen as the main advantages, while for those not in favour the main disadvantage stated was "you cannot see what you are getting". Thirty-four percent of those who bought meat at supermarkets saw no advantage in buying meat in a pre-wrapped plastic pack.

FREEZING MEAT AND BULK BUYING

Households with Freezers. Fifty-two percent of the households had chest deep freezers and an additional 39 percent had combination refrigerator/freezers. Thus 91 percent of households surveyed had some capacity to store frozen meat. Greater proportions of larger households (3 or more occupants) and/or households in the clerical, sales and service, and tradesman and labourer groups, had chest deep freezers.

Freezing Meat. Of those households with the capacity to store frozen meat, 73 percent had frozen beef and 69 percent had frozen sheep meats in the last year. Smaller proportions of households had frozen other types of meat.

The majority of respondents (75 percent) saw no disadvantage in freezing red meats. The reasons given by the 21 percent who saw a disadvantage related to loss in quality.

Bulk Buying. Sixty-one percent of the households had bought meat in bulk (5 kilos or more) in the last year. Similar numbers of households bought beef and sheep meats with smaller numbers buying other types of meat.

The private butcher was the outlet with the greatest share of bulk purchases, with a large proportion of those who usually bought meat at supermarkets buying bulk meat from the butcher. Direct farm supplies and freezing works were also important outlets for bulk meat.

CHAPTER 1

INTRODUCTION

1.1 Purpose of Study

In recent years there have been a number of factors affecting the meat consumption and purchasing patterns of Christchurch households. These include:

1. Large fluctuations in the prices of beef, sheep meats, pork and other types of meat (See Appendix 14).
2. Increased promotional activity by chain butchers and supermarkets, including television, radio, newspaper and direct mail advertising.
3. Pre-wrapping of meat into plastic packs by supermarkets.
4. Increased attention given to in-store promotion of meat by all retail outlets.
5. Promotion of bulk buying of meat with special discounts.
6. A rapid increase in the number of households owning deep freezers.
7. An increase in the number of takeaway meal outlets and the types of meals offered by these outlets.

One of the problems the meat trade faces when planning its marketing operations is the lack of detailed and up-to-date statistics about the extent these factors have affected households' purchasing and consumption patterns.

A consumer survey was therefore planned with the following purpose:

to interview a random sample of 300 Christchurch households in order to examine:

1. household consumption and purchasing patterns,
2. factors affecting these purchasing patterns.

1.2 Research Procedure

The sample. The population was defined as households in the Christchurch urban area. The planned sample of 300 households was drawn up as follows:

1. Christchurch was divided into its 43 suburbs.
2. twenty of these were then selected on the basis of convenience to interview, yet ensuring a representative socio-economic cross section[1]
3. from each suburb an address was randomly selected to act as a starting point for 15 interviews (every second house in either direction to be interviewed).

Geographical details of the achieved sample of 292 households are in Appendix 2.

The questionnaire. The final format of the questionnaire was determined after pilot testing and redrafting. It was divided into seven sections covering the following questions.

Section 1: Whether the household used meat; who usually bought the meat; types of meat served regularly (every two weeks), and less regularly (every six months); whether the household bought take-aways and the types bought regularly and less regularly; whether the household always served meat with the main meal of the day; whether the household had pet cats or dogs and what they were fed.

Section 2: The retail outlet used to buy meats, the frequency of purchase, weekly expenditure on red meats and non-red meats.

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[1]Real Estate prices were used as an indication of the socio-economic status of each suburb.

Section 3: Reasons influencing choice of outlet and attitudes to pre-wrapped meat.

Section 4: Preferences for different cuts of meat, changes in meat consumption patterns and reason for change.

Section 5: Ownership of chest deep freezer or refrigerator with freezer; bulk purchases of meat; attitudes towards buying in bulk and freezing meat.

Section 6: Reasons for household not eating meat.

Section 7: Socio economic characteristics of the household.

A copy of the questionnaire is included as Appendix 1.

The interviews. Most of the interviews were carried out during the last week of April and first week of May, with the majority on Saturday morning or early Saturday afternoon. The team of interviewers obtained interviewing experience through pilot testing and a training session. Ten percent of the completed interviews were checked with a telephone callback.

The analysis. The collected data were coded and edited for computer analysis. Responses were tabulated and estimates were derived for the types of meat consumed, expenditure on meat and preferences for meat. The analysis involved examining the marginal frequencies for the variables (i.e. questions) and relationships between variables. Chi square tests were used to examine whether there were statistically significant relationships between variables.[2]

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[2]The 90 percent confidence level was used to test the various hypotheses about relationships between variables.

1.3 Characteristics of the Sample.

In order to test whether the achieved sample was representative of the population from which it was drawn, socio economic characteristics were compared between the sample and census data. Because census data were not available for the Christchurch urban area, New Zealand figures were used. (See Table 1)

Comparison of the occupation of the head of the household with the national figures showed the sample had a larger proportion in the professional and managerial group and a smaller proportion in the tradesman and labourer group.[3] However, the age of the head of the household and household composition characteristics were similar to the national figures.

[3] Care was taken to avoid any bias that may have occurred from "oversampling" the professional and managerial group and "undersampling" the tradesman labourer group. Where necessary the sample statistics for the different occupational groups were weighted by the proportion of each group in the population in order to derive estimates of the population parameters.

TABLE 1

Sample Characteristics

	Household Characteristics	Survey Sample	New Zealand Census[a] (excl. Agric. Workers) 1971
		%	%
(i)	Occupation of Head of Household		
	Professional and Managerial	21.8	13.6
	Clerical, Sales and Service	23.9	22.8
	Tradesman and Labourer	28.9	37.7
	Retired and Other	25.3	25.9
		100.0[c]	100.0
(ii)	Age of Head of Household[b]		
	Less than 25 years	8.6	6.7
	25 - 34 years	18.2	20.6
	35 - 49 years	26.0	29.3
	50 - 64 years	28.8	25.6
	Older than 64 years	18.5	17.7
		100.0	100.0
(iii)	Household Composition		
	Occupants: 1 - 2	43.0	40.5
	3 - 4	37.1	34.3
	More than 4	19.9	25.2
		100.0	100.0

[a] The 1976 figures have yet to become available.

[b] The age of the person who buys the meat (usually the wife) was taken as equivalent to the age of the head of the household.

[c] Because of rounding errors figures may not add exactly to 100.0 percent.

Source: Department of Statistics. 1971 New Zealand Census of Population and Dwellings.

CHAPTER 2

HOUSEHOLD CONSUMPTION PATTERNS

2.1 Households Serving Meat

Of the 292 households interviewed 289 (99 percent) consumed meat.[4] The majority of these households served meat regularly, with 59 percent always serving meat with the main meal of the day.

2.2 Red Meats

Beef, sheep meats and pork. Beef was served regularly (at least every two weeks) by 96 percent of households, compared with 71 percent for lamb, 44 percent for hogget/mutton and 28 percent for pork. Beef was served at least once every six months by 98 percent of households, compared with 85 percent who served lamb, 66 percent who served hogget or mutton and 63 percent who served pork (see Table 2).

Steak and chops, and roasts. Similar proportions of households served grilling steak and casserole steak regularly, with a smaller proportion having served roasts. Larger proportions of households served lamb, hogget/mutton and pork chops regularly, compared with those who served lamb, hogget/mutton and pork roasts (see Table 2).

Socio economic characteristics. Grilling steak was served regularly by greater proportions of larger households (3 or more occupants) as well as households in the professional and managerial group and middle and younger age groups. In contrast, a larger porportion of older age groups (50 years and over) served hogget and mutton chops regularly. However, no clear relationships emerged for lamb or pork chops.

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[4]The reasons given by three households for not using meat were religion (1) and health (2). For the remainder of this report households that served meat will be referred to as households.

TABLE 2

Consumption of Red Meats

(i) Red Meats	Beef	Lamb	Hogget/Mutton	Pork
	%	%	%	%
Served:				
Regularly (2 wks)	95.8	71.3	44.3	28.4
Less Regularly (6 mths)	2.8	13.5	21.8	34.3
Rarely or Not Served	1.4	15.2	33.9	37.4
	100.0	100.0	100.0	100.0

(ii) Steak and Chops	Grilling Steak	Casserole Steak	Lamb Chops	Hogget/Mutton Chops	Pork Chops
	%	%	%	%	%
Served:					
Regularly (2 wks)	74.7	73.4	64.0	35.3	25.3
Less Regularly (6 mths)	10.4	8.7	14.2	21.5	29.1
Rarely or Not Served	14.9	18.0	21.8	43.3	45.7
	100.0	100.0	100.0	100.0	100.0

(iii) Roasts	Beef	Lamb	Hogget/Mutton	Pork
	%	%	%	%
Served:				
Regularly (2 wks)	63.0	43.6	31.8	15.8
Less Regularly (6 mths)	18.3	23.5	24.9	27.7
Rarely or Not Served	18.7	32.9	43.3	56.4
	100.0	100.0	100.0	100.0

Valid Responses[a] = 289

[a] For some questions there were a few cases where an invalid response occurred. This was because a respondent failed to provide an answer to the question or the interviewer failed to record the response.

Greater proportions of larger households (3 or more occupants) served the different types of roasts (excl. pork) regularly. There was also a larger proportion of older age groups (35 years and older) that served roast hogget/mutton regularly, while for roast beef there were larger proportions of households in the clerical sales and service, tradesman and labourer groups. No clear relationships emerged for roast pork.

The details of the socio economic characteristics of households consuming red meats, are included as Appendix 4.

2.3 Preferences for Red Meats

Steak and chops. When respondents were asked their preferences between beef steak, lamb chops and pork chops (given that the prices were the same), 38 percent had a clear preference for beef steak, 20 percent for pork chops, 18 percent for lamb chops and 23 percent were undecided or did not have a consistent preference.

A larger proportion of respondents in the professional and managerial occupational group preferred pork chops with the clerical sales and service group preferring beef steak. For the different age groups, there was a larger proportion in the 25 - 64 year old group preferring beef steak, and in the over 64 year old group there was a stronger preference for lamb. In the under 25 year old group the preference was for pork chops (Table 3).

TABLE 3

Preference for Steak and Chops by Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales & Service	Tradesman and Labourer	Other and Retired
	%	%	%	%
Preference for:				
Beef	34.4	46.3	35.8	36.1
Lamb	13.1	14.9	18.5	27.8
Pork	31.1	13.4	23.3	12.5
Undecided	21.3	25.4	22.2	23.6
	100.0	100.0	100.0	100.0
Valid Responses	61	67	81	72

(ii) Age	Under 25 Yrs	25-34 Yrs	35-49 Yrs	50-64 Yrs	Over 64 Yrs
	%	%	%	%	%
Preference for:					
Beef	32.0	47.1	40.5	35.7	33.3
Lamb	8.0	15.7	21.6	14.3	27.8
Pork	32.0	19.6	18.9	23.8	13.0
Undecided	28.0	17.6	18.9	26.2	25.9
	100.0	100.0	100.0	100.0	100.0
Valid Responses	25	51	74	84	54

Preference for roast meats. Thirty-one percent of the respondents had a clear preference for roast lamb, with 27 percent preferring roast pork, 20 percent preferring beef and 23 percent who were undecided or did not have a consistent preference.

Larger proportions of respondents in the professional and managerial, and tradesman and labourer groups preferred roast pork, while in the clerical, sales and service group there was a stronger preference for beef. In the younger age groups there was a stronger preference for roast lamb and pork and in the over 64 year old group for roast lamb (Table 4).

TABLE 4

Preference for Roast Meats by Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales & Service	Tradesman and Labourer	Other and Retired
	%	%	%	%
Preference for:				
Beef	19.7	25.4	13.6	20.8
Lamb	27.9	23.9	35.8	37.5
Pork	31.1	22.4	33.3	18.1
Undecided	21.3	28.4	17.3	23.6
	100.0	100.0	100.0	100.0
Valid Responses	61	67	81	72

(ii) Age	Under 25 Yrs	25-34 Yrs	35-49 Yrs	50-64 Yrs	Over 64 Yrs
	%	%	%	%	%
Preference for:					
Beef	12.0	11.8	21.6	22.6	24.1
Lamb	48.0	31.4	31.1	23.8	33.3
Pork	36.0	35.3	24.3	25.0	20.4
Undecided	4.0	21.6	23.0	28.6	22.2
	100.0	100.0	100.0	100.0	100.0
Valid Responses	25	51	74	84	54

Details of the disaggregated preferences and how the aggregated preferences of Tables 3 and 4 were derived are given in Appendix 5.

Preferences compared with consumption. The majority of those who had a preference for beef steak and roast beef served them regularly. However, large proportions of those who preferred lamb and pork did not serve them regularly, with only 25 percent of those preferring roast pork serving it regularly (Table 5). The implications of this finding are discussed in Chapter 5 (section 5.2).

TABLE 5

Frequency of Serving "Preferred Meat"

(i) Steak and Chops	"Preferred Meat" Beef Steak	Lamb Chops	Pork Chops
	%	%	%
"Preferred Meat" Served:			
Regularly (2 wks)	83.6	71.7	44.1
Less Regularly (6 mths)	10.0	9.4	30.5
Rarely or Not Served	6.4	18.9	25.4
	100.0	100.0	100.0
Valid Responses	110	53	59

(ii) Roast Meats	"Preferred Meat" Roast Beef	Roast Lamb	Roast Pork
	%	%	%
"Preferred Meat" Served:			
Regularly (2 wks)	71.9	48.3	24.7
Less Regularly (6 mths)	12.3	19.1	35.1
Rarely or Not Served	15.8	32.6	40.3
	100.0	100.0	100.0
Valid Responses	57	89	77

2.4 Other Types of Meat

Mince and smallgoods. Sixty-five percent of the households served mince regularly, compared with 74 percent serving smallgoods (sausages, saveloys, luncheon sausage etc.). However, similar proportions served the two types of meat at least once every six months (see Table 6).

For both mince and smallgoods greater proportions of younger households (under 35 years) served the meats regularly. Also more households with three or more occupants regularly consumed mince compared with 1 - 2 occupant households (see Appendix 6).

Fancy smallgoods and edible offal. Only 7 percent of the households that served meat regularly served fancy smallgoods (salami etc.) with 16 percent having served it in the last six months. For edible offal 21 percent served it regularly with 45 percent serving it in the last six months (see Table 6).

Apart from a larger proportion of the middle age group (25 - 49 years) serving edible offal regularly, no clear relationships emerged for the socio economic characteristics of regular consumers of fancy smallgoods or edible offal (see Appendix 6).

Ham and bacon. Twenty nine percent of households served ham regularly compared with 61 percent for bacon, with 69 percent serving ham and 84 percent serving bacon every six months (see Table 6).

Ham and bacon consumption was characterised by a larger proportion of households in the tradesman and labourer group and older age groups consuming the meats regularly (see Appendix 6).

Poultry and fish. A slightly larger proportion of households (61 percent) served fish regularly compared with poultry (54 percent). However, 87 percent had served poultry in the last six months compared with 84 percent for fish (see Table 6).

A greater proportion of households in the professional and managerial group served fish regularly, with little variation in proportions for the number of occupants in the household or the age of groups. There were no clear relationships between the socio economic characteristics of households that served poultry regularly (see Appendix 6).

TABLE 6

Consumption of Other Types of Meat

Frequency of Serving	Mince	Smallgoods	Fancy Smallgoods	Offal
	%	%	%	%
Served:				
Regularly (2 wks)	64.7	74.0	6.9	21.1
Less Regularly (6 mths)	20.4	14.5	8.7	23.9
Rarely or Not Served	14.9	11.4	84.4	55.0
	100.0	100.0	100.0	100.0

Frequency of Serving	Ham	Bacon	Poultry	Fish
	%	%	%	%
Served:				
Regularly (2 wks)	28.7	60.9	54.0	60.9
Less Regularly (6 mths)	39.8	23.5	32.9	22.8
Rarely or Not Served	31.5	15.6	13.1	16.3
	100.0	100.0	100.0	100.0

Valid Responses 289

2.5 Changes in Meat Consumption

Household having changed. Seventeen percent of the households indicated they were eating different types of meat than they were a year ago. A larger proportion of those who had changed were in households with more than two occupants (Table 7).

TABLE 7

Changes in Meat Consumption by Household Composition

Eating different meats than a year ago:	1 - 2 Occupants	3 - 4 Occupants	Over 4 Occupants
	%	%	%
Yes	9.8	22.3	24.1
No	90.2	77.8	75.9
	100.0	100.0	100.0
Valid Responses	123	108	58

Also larger proportions of those who had changed were in the professional and managerial occupations and younger age groups (see Appendix 7).

Reasons for change in consumption patterns. Price was the most frequent reason given for changing the household's meat eating habits. Other reasons given included a change in the household's income, change in tastes, health reasons and to increase the variety in diet (Table 8).

TABLE 8

Reasons for Changing Meat Consumption

Reason	%
Price	62.0
Income	10.0
Taste	8.0
Health	4.0
Variety	4.0
Family getting older	4.0
Other	8.0
	100.0
Valid Responses 50	

Note: The above percentages refer to those who had changed their meat consumption.

Types of meats. As could be expected from the recent lower prices of beef relative to sheep meats (see Appendices 14, 15) households were eating more beef and less sheep meats and pork. However, there was little change in the consumption of other types of meat, except for poultry and fish, where small proportions of households had increased their consumption, and ham and bacon where a small proportion of households had decreased their consumption (Table 9).

TABLE 9

Changes in Meat Consumption

Households Consuming:	Beef	Sheep Meats	Pork	Mince	Small Goods
	%	%	%	%	%
More	56.0	24.0	16.0	14.0	16.0
Less	22.0	46.0	40.0	20.0	14.0
Unchanged	22.0	30.0	44.0	66.0	70.0
	100.0	100.0	100.0	100.0	100.0
"Swing"	34.0	-22.0	-24.0	-6.0	2.0

Households Consuming:	Ham/ Bacon	Offal	Poultry	Fish
	%	%	%	%
More	4.0	2.0	22.0	18.0
Less	16.0	10.0	10.0	6.0
Unchanged	80.0	88.0	68.0	76.0
	100.0	100.0	100.0	100.0
"Swing"	-12.0	-8.0	12.0	12.0

Valid Responses 50

Note: The percentages are of those households that had changed their meat consumption in the last year.

2.6 Takeaway Meals

Households having takeaways. Sixty percent of the households had had takeaway meals in the last 6 months with larger proportions of these being households with rather than without children (83 percent compared with 48 percent); larger proportions were also evident in the professional and managerial, and tradesman and labourer groups, and the younger age groups (especially less than 35 years) (Table 10).

TABLE 10

Takeaway Meals by Household Composition by Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales & Service	Tradesman and Labourer	Other and Retired
	%	%	%	%
Households with:				
children	91.3	80.8	76.2	100.0
no children	60.5	43.9	56.4	40.3
All households	72.1	58.2	66.7	44.4
Valid Responses	61	67	81	72

(ii) Age	Under 25 Yrs	25-34 Yrs	35-49 Yrs	50-64 Yrs	Over 64 Yrs
	%	%	%	%	%
Households with:					
children	100.0	92.5	74.4	60.0	-
no children	100.0	72.7	54.3	43.2	29.6
All households	100.0	88.2	64.9	45.2	29.6
Valid Responses	25	51	74	84	54

Types of takeaways. Fish and chips was the most common type of takeaway, with 43 percent of those households consuming takeaways consuming it regularly, and 84 percent in the last six months. This was followed by fried chicken with 17 percent consuming it regularly and 55 percent in the last six months. Smaller proportions of households consumed chinese meals, hamburgers and pizzas (Table 11).

TABLE 11

Different Types of Takeaways Consumed

Frequency of Buying	Fish and Chips	Fried Chicken
	%	%
Regularly (2 wks)	42.4	17.4
Less Regularly (6 mths)	41.9	37.8
Did Not Buy	15.7	44.8
	100.0	100.0

Frequency of Buying	Chinese Meals	Hamburgers	Pizzas
	%	%	%
Regularly (2 wks)	9.3	7.6	0.6
Less Regularly (6 mths)	22.1	15.7	11.0
Did Not Buy	68.6	76.8	88.4
	100.0	100.0	100.0

Valid Responses 172

Note: The percentages are of those households consuming takeaways.

2.7 Pet Food

Households with pets. Fifty-two percent of all households had pets (cats and dogs) with larger proportions being households with children (70 percent compared with 43 percent) and in younger age groups (Table 12).

TABLE 12

Households with Pets by Household Composition by Age of Head of Household

Composition of Household	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
	%	%	%	%	%
Households with:					
Children	77.8	77.5	64.1	60.0	-
No Children	56.0	63.6	60.0	43.1	25.9
All Households	64.0	75.5	62.2	45.1	25.9
Valid Responses	25	51	74	82	54

Note: The percentages are of those households with pets in the different groups.

Pet food. Thirty-three percent of the households fed their pets on fresh meat only, with 30 percent feeding them canned pet food and processed sausage, and the remaining 40 percent using fresh and non-fresh processed meats. A significantly greater proportion of the older age group fed their pets on fresh meat only (Table 13).

TABLE 13

Type of Pet Food by Age of Head of Household

Pet Food Served	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
	%	%	%	%	%
Fresh	25.0	13.2	28.3	53.8	57.1
Canned/Processed	37.5	55.3	28.3	35.9	28.6
Fresh and Canned/ Processed	37.5	31.6	43.5	10.3	14.3
	100.0	100.0	100.0	100.0	100.0
Valid Responses	16	38	46	39	14

Note: The percentages are of those households with pets in the different groups.

CHAPTER 3

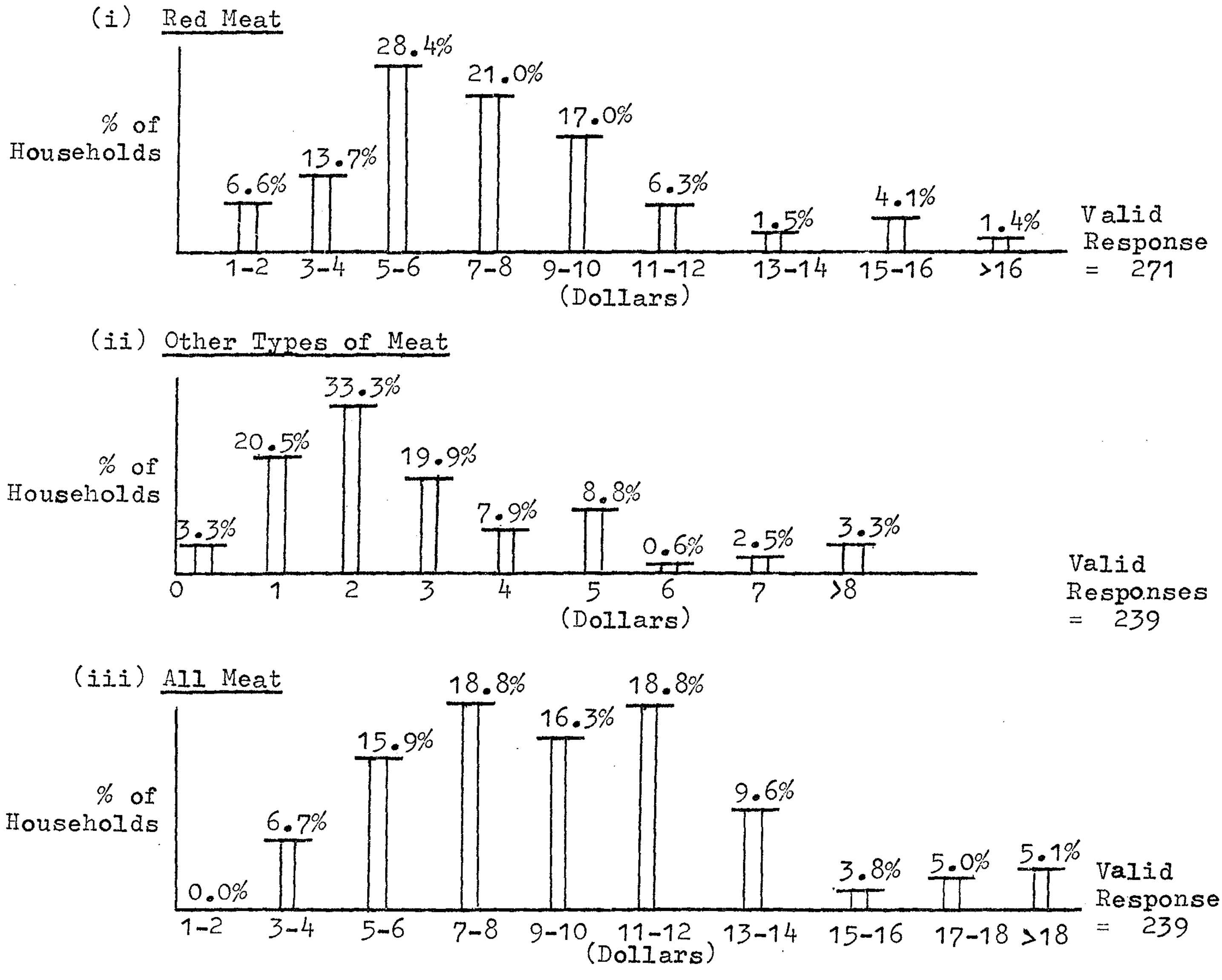
HOUSEHOLD PURCHASING PATTERNS

3.1 Expenditure

Weekly household expenditure. The average weekly household expenditure on red meats was $7.10 while for other types of meat it was $2.70. The average weekly expenditure for all meats was $9.90. The majority of households spent between $4 and $10 on red meats, between $1 and $3 for other types of meat and between $6 and $12 for all meats[5] (Figure 1).

FIGURE 1

Weekly Household Expenditure on Meat



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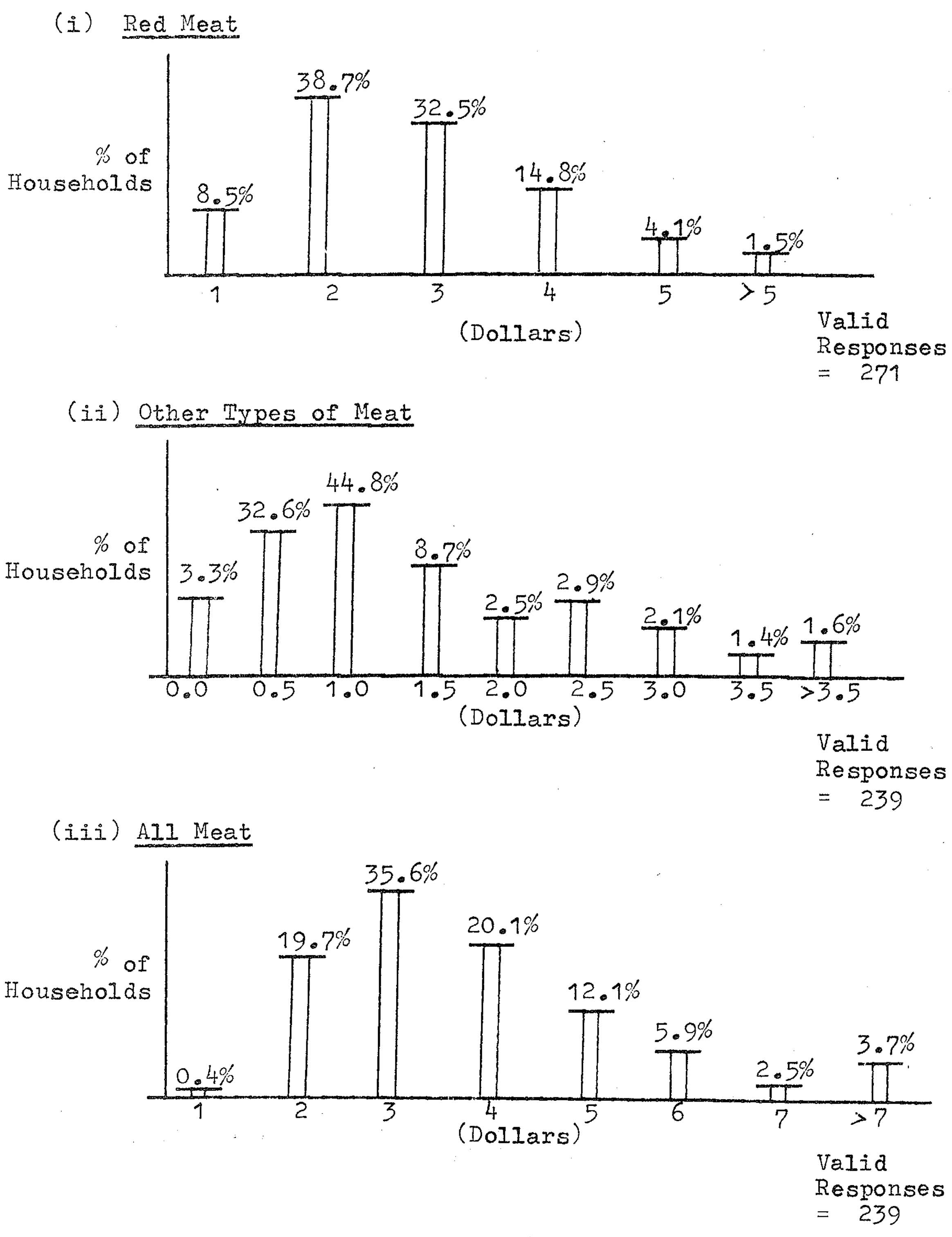
[5] These estimates exclude expenditure on pet meat. Other types of meat included smallgoods, fancy smallgoods, bacon, ham, edible offal, poultry and fish.

Per capita expenditure. The average weekly per capita expenditure on red meats was $2.40, while for other types of meats it was $1.00. The average per capita expenditure for all meats was $3.40. The per capita weekly expenditure on red meats for the majority of households was between $1.50 and $3.50, between $0.50 and $1.50 for other types of meats, and between $2.00 and $5.00 for all meat (Figure 2).

FIGURE 2

Weekly Per Capita Expenditure on Meat



<u>Socio economic characteristics</u>. There were distinct variations in the per capita expenditures on meat for households of different compositions. For both red and other types of meats, the average per capita expenditure was less for households with children and it also declined with the number of occupants in the household for both households with and without children (Table 14).

TABLE 14

Average Per Capita Expenditure on Meat
By Household Composition

(i) Red Meats	1-2 Occupants	3-4 Occupants	Over 4 Occupants	All Households
	%	%	%	%
Households with:				
No children	\$2.86(110)[a]	\$2.62 (51)	\$1.95 (17)	\$2.70(178)
Children	-	\$1.90 (51)	\$1.68 (40)	\$1.84 (92)
All Households	\$2.88(112)	\$2.26(102)	\$1.76 (57)	\$2.40(270)
(ii) Other Types of Meats				
Households with:				
No children	\$1.29 (96)	\$0.80 (42)	\$0.67 (16)	\$1.09(154)
Children	-	\$0.71 (48)	\$0.58 (36)	\$0.66 (85)
All Households	\$1.09 (97)	\$0.75 (90)	\$0.61 (52)	\$0.95(239)
(iii) All Meat				
Households with:				
No children	\$4.25 (96)	\$3.13 (42)	\$2.66 (16)	\$3.81(154)
Children	-	\$2.61 (48)	\$2.30 (36)	\$2.52 (85)
All Households	\$4.27 (97)	\$2.98 (90)	\$2.41 (52)	\$3.38(239)

[a]The numbers in brackets indicate the number of respondents. Averages have not been included where there was only one household in a category.

While there was little variation in the per capita expenditure between the different occupational groups, there was a tendency for households in the older age group to have a higher average per capita expenditure on meat than similar households with a younger average age. This was especially noticeable for other types of meats (see Appendix 8).

3.2 Buying Meat

Person in household who buys. For the majority of the households the wife usually purchased the meat (Table 15).

TABLE 15

Person Who Buys the Meat

Person	All Households	Households with Husband & Wife
	%	%
Wife	68.9	78.0
Husband	11.1	12.6
Wife and Husband	8.3	9.4
Single Male	3.1	-
Single Female	6.6	-
Other	2.1	-
	100.0	100.0
Valid Responses	289	254

However, the husband's involvement was greater for households in the younger and older age groups (Table 16).

TABLE 16

Person Who Buys Meat by Age of Head of Household

Person	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
	%	%	%	%	%
Wife	61.1	75.0	86.3	78.1	73.8
Husband	11.1	14.6	8.2	11.0	21.4
Husband and Wife	27.8	10.4	5.5	11.0	4.8
	100.0	100.0	100.0	100.0	100.0
Valid Responses	18	48	73	73	42

Note: The percentages are for households with a husband and wife in the different groups.

Frequency of buying. Eighty-two percent of the households bought red meat at least once a week. Other types of meat tended to be bought less frequently (Table 17).

TABLE 17

Frequency of Buying Meat

Frequency	Red Meats	Smallgoods	Ham/ Bacon	Edible Offal	Poultry
	%	%	%	%	%
More than twice per week	12.4	4.7	5.7	2.3	3.4
Twice per week	19.9	14.7	12.3	8.0	6.8
Once per week	49.2	57.8	43.6	37.9	23.7
Fortnightly	7.5	13.4	16.1	19.5	21.7
Monthly	3.8	4.3	6.2	11.5	20.3
Two months or more	7.1	5.2	16.1	20.7	24.2
	100.0	100.0	100.0	100.0	100.0
Valid Responses	266	232	211	87	207

Note: The percentages are for households serving the different types of meat.

Outlet used. For red meats 42 percent of the households used private butchers, 13 percent chain butchers[6], 25 percent supermarkets and 14 percent butchers or supermarkets. For other types of meat, except edible offal, the supermarket had a greater share of the market with 51 percent of households buying their poultry at supermarkets. Also, 16 percent bought poultry directly from poultry farms (Table 18).

TABLE 18

Outlet Used to Buy Meat

	Red Meats	Smallgoods	Ham/ Bacon	Edible Offal	Poultry
	%	%	%	%	%
Private Butcher	41.9	39.1	40.2	55.4	12.6
Chain Butcher	12.8	9.9	6.8	14.9	2.0
Supermarket	24.6	37.9	32.1	16.8	51.2
Butcher and Supermarket	13.5	5.9	6.4	5.9	2.4
Grocer/Dairy	0.0	2.4	6.0	0.0	2.4
Other	7.2	4.8	8.5	6.9	29.4[a]
	100.0	100.0	100.0	100.0	100.0
Valid Responses	289	253	234	101	246

[a]15.9 percent purchased directly from poultry farms.

Note: The percentages are of those households serving the different types of meat.

A larger proportion of younger households tended to buy red meats at supermarkets, with a larger proportion of the middle age group using the chain butcher and larger proportions of the older age group using private butchers (see Appendix 9). However, caution is necessary when identifying the socio economic characteristics of households using different outlets because noticeably larger proportions of households in certain suburbs tended to use one particular outlet (see Appendix 10). This indicated that the handiness of a particular outlet to home appears to have an important influence on the choice of outlet.

[6]For this survey private butchers were defined as those seen by respondents as being individually operated while chain butchers were butchers seen to belong to a group. eg. M.M.M.

Frequency of buying and outlet used. Households that shopped for red meats at supermarkets tended to buy once a week, while for those shopping at private butchers or both supermarkets and butchers there was a tendency to buy more often than once a week. In contrast, households buying poultry at supermarkets tended to buy less than once a week. This was also the case for those who bought directly from poultry farms (Table 19).

TABLE 19

Frequency of Buying by Outlet

Frequency	Private Butcher[a]	Chain Butcher	Super-Market	Super-Market & Butcher	Grocer Delicat.	Other[b]
	%	%	%	%	%	%
(i) Red Meat						
More than Weekly	38.5	22.2	24.8	45.9	-	12.6
Weekly	38.5	58.3	69.1	35.1	-	50.0
Less than Weekly	22.9	19.4	5.9	18.9	-	37.5
	100.0	100.0	100.0	100.0		100.0
Valid Responses	109	36	68	37		16
(ii) Poultry						
More than Weekly	20.6	20.0	8.6	33.3	16.7	2.2
Weekly	27.6	40.0	29.3	16.7	16.7	6.7
Less than Weekly	51.7	40.0	62.1	50.0	66.7	91.1
	100.0	100.0	100.0	100.0	100.0	100.0
Valid Responses	29	5	116	6	6	45

[a]For a few households (especially households in the over 50 year age group) the private butcher delivered the meat to the house. These cases have been included in this table.

[b]This category included those who bought directly from farms.

Note: The percentages are of those households serving the different types of meat.

<u>Reasons influencing choice of outlet</u>. Respondents were read a list of reasons that could influence which retail outlet they used to buy their meat. At the same time they were handed a card with a 7 point scale and asked to indicate the order of importance of the reasons. The scale used was:

Very Important	Quite Important	Slightly Important	Neither	Slightly Unimportant	Quite Unimportant	Completely Unimportant
1	2	3	4	5	6	7

A comparison of the frequency of responses to the different reasons indicates that "cleanliness of the shop" was seen as the most important reason. The "selection of the types of meat" was considered the next most important, followed by "the personal service given", and of fourth importance was "handiness to home". Even though "cheaper prices" was ranked behind the other reasons, 51 percent of the respondents considered it to be very or quite important (Table 20).

TABLE 20

Reasons Influencing Choice of Outlet

(i) Absolute Percentages	Cleanliness of Shop	Selection of Types of Meat	Personal Service Given	Handiness to Home	Cheaper Prices
	%	%	%	%	%
Very Important	66.0	34.4	35.3	31.6	29.8
Quite Important	22.0	36.9	30.7	25.5	21.6
Slightly Important	5.7	12.8	9.9	12.8	10.3
Neither Important Unimportant	3.5	8.5	7.4	9.6	14.2
Slightly Unimportant	0.4	2.1	6.4	6.7	7.8
Quite Unimportant	1.8	4.6	5.7	7.8	12.1
Completely Unimportant	0.6	0.7	4.6	6.0	4.2
	100.0	100.0	100.0	100.0	100.0
(ii) Cumulative Percentages					
Very Important	66.0	34.4	35.3	31.6	29.8
Quite Important	88.0	71.3	66.0	57.1	51.4
Slightly Important	93.7	84.1	75.9	69.9	61.7
Neither Important Unimportant	97.2	92.6	85.3	79.5	75.9
Slightly Unimportant	97.6	94.7	89.7	86.2	83.7
Quite Unimportant	99.4	99.3	95.4	94.0	95.8
Completely Unimportant	100.0	100.0	100.0	100.0	100.0

Valid Responses = 282

A comparison of the reasons influencing the choice of outlet with the outlet used to buy red meat revealed that a larger proportion of households who shopped at butchers considered "handiness to home" and "personal service given" to be important (Table 21). In contrast a larger proportion of those who shopped at supermarkets considered "cheaper prices" to be important. While for "selection of types of meats" slightly larger proportions of those who shopped at private butchers and supermarkets thought it important, similar proportions of those who shopped at butchers and supermarkets thought "cleanliness at the shop" to be important.

TABLE 21

Reasons Influencing Choice of Outlet by Outlet Used to Buy Red Meats

Reason	Percentage considering reason to be <u>very</u> or <u>quite</u> important				
	Private Butcher	Chain Butcher	Supermarket	Supermarket & Butcher	Other
	%	%	%	%	%
1. Handiness to Home	63.6	55.6	47.9	60.5	50.0
2. Personal Service Given	81.5	72.2	38.0	68.4	38.9
3. Selection of Types of Meats	72.0	66.6	73.3	65.7	83.3
4. Cheaper Prices	39.0	50.0	73.3	42.1	66.7
5. Cleanliness of Shop	88.1	88.9	90.2	84.2	83.3
Valid Responses	118	36	71	38	18

3.3 Prewrapped Meat

Advantages and disadvantages. When asked whether they considered it an advantage to buy meat in a prewrapped plastic pack (as available in supermarkets) 28 percent of the respondents said yes, with 67 percent saying no and 5 percent being undecided.

Of those who thought there was an advantage the most frequent reason given was convenience ("ease of handling"), with other reasons given being "hygiene" and "able to see what one is getting". For those who said no, the most frequent reason given was "it is difficult to see what one is buying". Other disadvantages were "freshness suspect", "additional expense" and "wasteful packaging" (Table 22).

TABLE 22

Advantages and Disadvantages with Buying Prewrapped Meat

(i) Advantages	%	(ii) Disadvantages	%
"Convenience" ("Ease of Handling")	57.7	"Cannot See What One is Getting"	53.0
"More Hygienic"	20.5	"Freshness Suspect"	15.4
"Can See What One is Getting"	19.2	"Additional Expense"	10.1
		"Wasteful Packaging"	8.1
Other	2.6	Other	13.4
	100.0		100.0
Valid Responses	78	Valid Responses	149

Attitudes and outlet used. As could be expected a large proportion of those who shopped at supermarkets saw an advantage in being able to buy meat in prewrapped plastic packs, although 32 percent who shopped there saw no advantage. The majority of those who shopped at butchers saw no advantage in buying meat in a prewrapped plastic pack (Table 23).

TABLE 23

Attitudes Towards Prewrapped Plastic Packs by Outlet Used to Buy Red Meat

Advantage in Prewrapped Plastic Pack:	Private Butcher	Chain Butcher	Supermarket	Supermarket and Butcher	Other
	%	%	%	%	%
Yes	15.0	24.3	59.2	20.5	21.1
No	81.7	73.0	32.4	74.4	78.9
Undecided	3.3	2.7	8.5	5.1	0.0
	100.0	100.0	100.0	100.0	100.0
Valid Responses	120	37	71	39	19

There was little difference between responses for the different age and occupational groups.

CHAPTER 4

FREEZING MEAT AND BULK BUYING

4.1 Freezing Meat

Household with deep freezer. Fifty-two percent of the households had chest deep freezers with an additional 39 percent having refrigerator/freezers. Thus 91 percent of households had the capacity to store frozen meat. Of those households without chest deep freezers 13 percent had the intention to purchase one in the next year.

Greater proportions of households with more than two occupants had chest deep freezers (Table 24).

TABLE 24

Households with Deep Freezers by Composition of Household

Type of Freezer	1 - 2 Occupants	3 - 4 Occupants	Over 4 Occupants
	%	%	%
Chest Freezer	39.8	59.3	62.1
Refrigerator/Freezer	45.5	35.2	34.5
No Freezer	14.6	5.6	3.4
	100.0	100.0	100.0
Valid Responses	123	108	58

There were also larger proportions of households in the clerical, sales and service and tradesman labourer groups and in the 25-49 year old age groups with chest deep freezers (see Appendix 11).

Types of meat frozen. Of those households with freezing storage (chest freezer or refrigerator/freezer) 73 percent had frozen beef, 69 percent sheep meats, 35 percent pork and 26 percent bacon or ham in the last year. Fifty percent had frozen other types of meat, the most common being sausages and poultry. Twenty four percent had not frozen any meat.

Attitudes towards freezing meat. When respondents were asked whether they thought there were any disadvantages in freezing red meat 21 percent replied yes and 75 percent replied no with 4 percent undecided. The disadvantages stated related to the loss in the quality of the meat (Table 25).

TABLE 25

Disadvantages Seen From Freezing Red Meats

Reason	%
"Loss of flavour"	50.8
"Loss of freshness"	11.5
"Loss of quality"	11.5
"Dries out"	4.9
"Colour changes"	3.3
Other	18.0
	100.0
Valid Responses	61

Note: The percentages are of those respondents who saw a disadvantage in freezing red meat.

4.2 Bulk Buying

Households that bought in bulk. Sixty-one percent of the households had bought meat in bulk (5 kilos (10 lbs) or more) in the last year. Larger proportions of these were households with more than two occupants (Table 26).

TABLE 26

Households Buying in Bulk by Household Composition

Buying in Bulk:	1 - 2 Occupants	3 - 4 Occupants	Over 4 Occupants
	%	%	%
Yes	31.9	68.6	54.4
No	68.1	31.4	45.6
	100.0	100.0	100.0
Valid Responses	119	105	57

As with those households with deep freezers there were larger proportions in the middle age groups and tradesman and labourer groups buying in bulk (see Appendix 12).

Types bought. Of the 150 households that bought meat in bulk 61 percent had bought beef, 69 percent sheep meat, 35 percent pork, 12 percent bacon and 19 percent other types.

Outlet used. The private butcher had the largest proportion of bulk purchases. A significant proportion of households also obtained bulk supplies from farms. The use of outlet did not vary significantly with the type of meat bought in bulk (Table 27).

TABLE 27

Outlet Used to Obtain Bulk Supplies

Outlet	Beef	Sheep Meats	Pork	Bacon	Other
	%	%	%	%	%
Private Butcher	39.6	35.0	31.4	50.0	28.6
Chain Butcher	6.6	7.8	3.9	5.6	7.1
Supermarket	4.4	10.7	3.9	0.0	3.6
Butcher and Supermarket	6.6	3.9	7.8	11.1	14.3
Private Wholesaler	6.6	5.8	11.8	11.1	3.6
Butcher and/or Supermarket and Farm	24.2	15.5	21.6	5.6	17.9
Freezing Works	5.5	14.6	3.9	16.7	14.3
Other	6.6	6.8	15.7	0.0	10.7
	100.0	100.0	100.0	100.0	100.0
Valid Responses	91	103	51	18	28

Outlet used to buy bulk and usual outlet. Large proportions of households did not use their usual outlet when they bought red meats in bulk. This was especially evident for those who usually bought red meat at supermarkets and chain butchers where only 26 percent and 36 percent respectively, made the bulk purchases at their usual outlet (Table 28).

TABLE 28

Outlet Used to Buy Red Meat in Bulk by Usual Outlet

Outlet Used to Buy Red Meat in Bulk	Usual Outlet for Red Meat				
	Private Butcher	Chain Butcher	Supermarket	Supermarket and Butcher	Other
	%	%	%	%	%
Private Butcher	53.7	18.2	21.1	33.3	9.1
Chain Butcher	0.0	36.4	5.3	0.0	0.0
Supermarket	5.6	0.0	26.3	0.0	0.0
Supermarket and Butcher	1.9	4.5	10.5	5.6	0.0
Private Wholesaler	3.7	4.5	5.3	22.2	18.2
Butcher and/or Supermarket and Farm	27.8	13.6	15.8	16.7	18.2
Freezing Works	3.7	9.1	15.8	5.6	36.4
Other	3.7	13.6	0.0	16.7	18.2
	100.0	100.0	100.0	100.0	100.0
Valid Responses	54	22	38	18	11

Advantages of buying in bulk. When asked what they thought the advantages were in buying in bulk, the majority of respondents gave "it is cheaper" as their first reason. For their second reason, the majority mentioned that it was convenient to have supplies of meat in the freezer and/or to buy meat less frequently.

CHAPTER 5

IMPLICATIONS FOR THE CHIRSTCHURCH MEAT TRADE

5.1 Introduction

The results are relevant to all sectors of the Christchurch meat trade (i.e. producers, processors, wholesalers and retailers) in that they provide information about the household demand for the different meat products. However, they are of special relevance to the different groups of retailers, (i.e. private butchers, chain butchers, supermarkets, private wholesalers and other retailers) because they give an indication of the market shares of the different groups, and provide information which can be used by the different groups to plan their marketing operations.

5.2 The Demand for the Different Meat Products

While the total per capita meat consumption in New Zealand[7] has remained relatively stable over recent years, there have been changes in the per capita consumption of the different types of meat, with increases in the per capita consumption of beef and poultry and decreases in the per capita consumption of sheep meats and pig meats (see Appendix 13). These changes have been associated with greater increases in the retail prices of sheep meats and pig meats relative to retail prices for beef.[8]

While it was beyond the scope of the study to derive estimates of the per capita consumption of the different meat products and the responses to changes in relative prices, the results do provide other measures. Tables 2 and 6 indicate the proportions of households that serve the different types of meat regularly (at least every two weeks). The extent of the response

[7] Per capita consumption figures are only available at the national level.

[8] Between 1970 and 1976 beef retail prices increased by approximately 50% while sheep meat and pig meat prices increased by over 100% (see Appendix 14).

to the relatively lower price for beef is demonstrated with 96 percent of households having served beef regularly compared with 71 percent having served lamb, 44 percent hogget or mutton, and 28 percent pork.[9] Larger proportions of the households who served these meats served steak and chops compared with those who served roasts.

Further evidence of households response to price is given in Table 5, where the majority of respondents who had a preference for beef served it regularly and smaller proportions of those that had a preference for lamb or pork served it regularly. For the 17 percent of households that were eating different types of meat than a year ago, price was given as the most frequent reason for the change (see Table 8) and Table 9 indicates the extent of the swing away from sheep meats and pork towards beef. The swing away from pork has occurred despite it becoming "cheaper" during the year prior to the survey. While pork is still relatively more expensive than similar cuts of beef and sheep meat (see Appendices 14, 15) in the year ending May 1977 average retail prices remained constant. In contrast the average retail prices for beef increased by 12 - 15% and the average retail price for sheep meats 20 - 50%.[10]

Larger proportions of households who had changed were households with three or more occupants (see Table 7) and/or in the professional and managerial occupational group and/or in the younger age group (see Appendix 7). Evidence of the responses of the different socio economic groups is given in Appendices 4 and 6. Greater proportions of households with three or more occupants and in the younger age groups had served beef regularly, while a larger proportion of households in the older age groups served sheep meats regularly.

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[9]See Appendices 14, 15 for the Christchurch wholesale and retail prices at the time of the survey.

[10]Source: Personal communication with Department of Statistics.

5.3 Retailers Market Shares

Table 18 provides an indication of the market shares of the different groups of retailers for the different types of meat.[11] While the butchers (private and chain) still have the largest share of the market, their share has declined markedly in the last decade with the supermarkets having a dramatic increase in their share. This is highlighted when the results are compared with results of a survey of Christchurch households undertaken in 1965.[12] When asked where they usually bought their meat, other than bacon, only 6 percent of the 351 households in the sample indicated they used the supermarkets, with 75 percent using butcher shops, and the remaining 19 percent using no regular shop or a freezing works retail shop.

Appendix 9 provides an indication of the occupation and age characteristics of households using the different outlets. While the households choice of outlet also appears to be influenced by the handiness of the different outlets to home (see Appendix 10), there was a tendency for households in the younger age group to use supermarkets with the middle age group using chain butchers and the older age group private butchers. If households currently in the younger age groups retain the habit of buying meat at supermarkets as they get older, butchers must anticipate a further decline in market share.

5.4 Implications for Retailers

The results provide information which can be used by the different groups of retailers to plan their marketing operations. This section will highlight some of the results considered relevant. However, it should be remembered that the purpose of the study was not to develop detailed marketing strategies for the different groups of retailers.

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[11] The proportion of households using the different retail outlets provides only an indication of the share of total sales.

[12] Yandle C.A. A Survey of Christchurch Consumer Attitudes to Meat, A.E.R.U. Publication No. 43, P. 3, Table 2.

<u>Household Expenditure on Meat.</u> The average weekly household expenditure on meat was $9.90 with the average per capita expenditure $3.40. However, there were large variations in the per capita expenditures between households (see Figure 2). The variations were mainly attributable to different household compositions (see Table 14), although households with the same composition but in older age groups, tended to have a higher per capita expenditure (see Appendix 8).

<u>Person in the Household who Buys the Meat.</u> While for the majority of households the wife usually made the purchases (see Table 15), the husband's role tended to be greater for households in younger and older age groups.

<u>Frequency of Buying Meat.</u> For households that shopped at supermarkets or chain butchers, there was a tendency to shop once a week, while for those shopping at private butchers, there was a tendency to shop more often (see Table 19).

<u>Attitudes of Respondents using Different Outlets.</u> Cleanliness of the shop was considered to be the most important reason by households using all the different outlets. However, there was a tendency for those using supermarkets to consider cheaper prices more important, and a tendency for those using butchers to consider handiness to home and personal service given to be more important (see Table 21).

<u>Attitudes to Prewrapped Meat.</u> A negative attitude was expressed towards buying meat in a prewrapped plastic pack by 67 percent of the households, with the most frequent disadvantage given being 'cannot see what one is getting' (see Table 22). A noticeable 32 percent of those who shopped at supermarkets saw no advantage in buying meat this way (see Table 23).

The Market for Bulk Meat Packs. The importance of the market for bulk meat packs is highlighted by the survey results (Chapter 4).

1) Ninety-one percent of the households had the capacity to store frozen meat and 52 percent had chest deep freezers.

2) The majority of households had a favourable attitude towards freezing red meat.

3) The majority of households actually froze meat.

For retailers dealing in large bulk packs (e.g. sides of beef) it is important to note that larger proportions of households in the clerical sales and service, and tradesman and labourer groups had chest deep freezers (see Appendix 11), and had bought meat in bulk (see Appendix 12).

Takeaway Meals. Sixty percent of the households had purchased takeaway meals in the last 6 months, with larger proportions being households with children and in the younger age groups (see Table 10). The traditional fish and chips meal was the most popular followed by fried chicken and then chinese meals (see Table 11).

Pet Food. Fifty-three percent of households had pet cats or dogs, which emphasises the importance of this market for meat retailers. Larger proportions of households in the older age group fed their pets on fresh meat only, while larger proportions of households in the younger age groups fed their pets on canned or processed pet food (see Table 13).

5.5 Further Research

The results of this study provide a set of data on which further research about household meat consumption and purchasing behaviour and attitudes can be based. The direction of any further research will depend on the particular information needs of the different sectors of the meat trade.

Common to all sectors is the need for a more detailed understanding about the nature of the demand for meat. The finding that households in younger age groups have a lower average per capita expenditure for meat than those in older groups (see Appendix 8) poses a number of questions, e.g. Is this because the younger age group buy cheaper cuts of meat? Are the younger age group spending more on non-meat forms of protein? What effects will this lower expenditure have on the demand for meat? etc.

The nature of the demand for the different types and cuts of meat also requires further investigation. It is recommended that a study of this type be repeated when the relative prices for different types of meat have changed. This will provide further evidence about households responses to price changes. Also, by using alternative research methods, such as consumer panels, consumer diaries, mail surveys and point of purchase interviews, more detailed information could be collected about consumption and purchasing behaviour and attitudes. While the current study has concentrated on the household characteristics of age, occupation and household composition, further research could investigate other household characteristics such as income, education, social class and perhaps "life style". These alternative bases for segmenting (grouping) households with different consumption and purchasing behaviour would lead to a clearer definition of target markets, and hence allow for more efficient direction of marketing effort.

With per capita consumption for meat relatively stable (see Appendix 13), and only a slow increase in population in the Christchurch area expected, it is anticipated the competition for market share between the different groups of retailers (i.e. private butchers, chain butchers, supermarkets, private wholesalers and other retailers) will increase. In order for any of these groups to maintain or increase their market share, it will be necessary for them to have efficient marketing operations.

While this study provides some information (sections 5.2, 5.3) on which to plan marketing operations, further research is needed. Such research should relate directly to the marketing decisions faced by different groups of retailers. This will include decisions relating to product range, pricing, the location and number of retail outlets, in store promotion, advertising and other forms of promotion.

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APPENDICES

QUESTIONNAIRE

MEAT SURVEY

CODING

Good morning/afternoon/evening:
I am from the Lincoln College Marketing Department. We are doing a survey about ChCh households' meat purchases. I wonder if you could help us by answering a few questions.
(ENSURE YOU ARE SPEAKING TO AN ADULT).

1. a. Does your household eat meat?
Yes ( ) No ( ) IF NO GO TO Q.6.

b. Who usually buys the meat for your household?
Wife ( ) Husband ( ) Other ______
ASK TO SPEAK TO THAT PERSON, IF THIS IS NOT POSSIBLE ARRANGE SUITABLE CALLBACK TIME

c. Here is a list of different types of meat (SHOW CARD)
(i) Which of these does your household eat regularly at least once fortnightly?
(ENTER 1 BELOW)
Red Meat: Beef: Grilling ( ) Casserole ( ) Roast ( ) Other ______
Lamb: Chops ( ) Roast ( ) Other ______
Hogget/Mutton: Chops ( ) Roast ( ) Other ______
Pork: Chops ( ) Roast ( ) Other ______
Mince ( ), Other Red Meats ______
Other Types: Smallgoods ( ) Fancy Smallgoods( ) Ham ( ) Bacon ( )
Edible Offal ( ) Other ______
White Meats: Poultry( ) Fish( ) Other ______
(ii) And what types have been served in the last 6 months?(ENTER 2 ABOVE)

d. (i) Does your household ever have takeaway meals (e.g. Fried Chicken, Chinese Takeaways, Fish and Chips etc.) or prepared meals (e.g. TV Dinners)?
Yes ( ) No ( ) IF NO Q.1.e.
(ii) What types does your household eat regularly at least once fortnightly?
(ENTER 1 BELOW)
Chicken ( ) Chinese ( ) Fish and Chips ( ) Hamburgers ( ) Pizzas ( )
TV Dinners ( ) Other ______
(iii) And what types has your household had in the last 6 months? (ENTER 2 ABOVE)

e. Does your household ever not have meat with the main meal of the day?
Yes ( ) No ( )

f. (i) Have you any pet cats or dogs?
Yes ( ) No ( ) IF NO Q.2.
(ii) What do you feed them?
Fresh Meat ( ) Canned Meat ( ) Other ______

2. I am now going to ask you about buying meat.
a. Where do you usually buy your: ENTER FREQUENCY IN DAYS AND WEEKS
b. And how often would you usually buy: AFTER OUTLET USED

	Super-market	Private Butcher	Chain Butcher	Dairy	Other
(i) Red Meats?					
(ii) Smallgoods?					
(iii) Ham/Bacon?					
(iv) Edible Offal?					
(v) Poultry					

c. On average how much would your household spend per week on:
(i) Red Meats? $ ______ (ii) All other types of meat? $ ______
PROMPT TO ENSURE THIS DOES NOT INCLUDE PET FOOD.

3. a. Now I am going to read you a list of reasons which may influence whether you buy your meat from a butcher's shop or a supermarket. Using this scale (SHOW SCALE A) please indicate how important the following are:

(i) Handiness to Home ______ (ii) The Personal Service Given ______ (iii) Selection of Types of Meat ______ (iv) Cheaper Prices ______ (v) Cleanliness of Shop ______

b. (i) Do you consider it an advantage to be able to buy your meat in a prewrapped plastic pack, as you can in supermarkets?
Yes ( ) No ( ) Undecided ( ) IF UNDECIDED Q.3.c.
(ii) Why? ______

c. Are there any other reasons which you consider to be important as to whether you might buy at a butcher's shop, supermarket or elsewhere?
No ( ) or ______

CODING

4. a. The prices of beef, lamb and pork have fluctuated in the last few years.
However if price/kilo were the same for: (TICK PREFERENCE)
(i) Grilling Steak ( ) and Lamb Chops ( ) which would you prefer? Undecided( )
(ii) Grilling Steak ( ) and Pork Chops ( ) " " " " ? Undecided( )
(iii) Lamb Chops ( ) and Pork Chops ( ) " " " " ? Undecided( )

b. Similarly if the price/kilo were the same for:
(i) Roast Beef ( ) and Roast Lamb ( ) which would you prefer? Undecided( )
(ii) Roast Beef ( ) and Roast Pork ( ) " " " " ? Undecided( )
(iii) Roast Lamb ( ) and Roast Pork ( ) " " " " ? Undecided( )

c. (i) Is your household eating different types of meat from a year ago?
Yes ( ) No ( ) Undecided ( ) IF NO OR UNDECIDED GO TO Q.5.
(ii) What types are you eating more of? (ENTER ✓ BELOW.
Beef ( ) Sheep Meats ( ) Pork ( ) Mince ( )
Smallgoods ( ) Ham/Bacon ( ) Edible Offal ( )
Poultry ( ) Fish ( ) Other ______
(iii) What types are you eating less of? ENTER X ABOVE.
(iv) Why is this so? ______

5. a. (i) Does your household have a chest deep freeze or a refrigerator with a deep freeze? Chest/F ( ) Refrig./F ( ) No ( ) IF CHEST/F Q.5.b.
(ii) Do you intend to get a chest deep freeze in the next year?
Yes ( ) No ( ) IF HOUSEHOLD DOES NOT HAVE REFRIG/F GO TO Q.5.c.

b. What types of meat have you stored in your deep freeze?
Beef ( ) Sheep Meats ( ) Pork ( ) None ( )
Bacon/Ham ( ) Other ______

c. (i) What types of meat have you bought in bulk (i.e. more than 10lb.(5 Kilo) lots)?
Beef ( ) Sheep Meats ( ) Pork ( ) None ( ) IF NONE Q5d
Bacon/Ham ( ) Other ______
(ii) Where do you obtain your bulk supplies of meat?
Supermarket ( ) Private Butcher ( ) Chain Butcher ( )
Specialist Bulk Supplier ( ) Other ______

d. What do you think the advantages are in buying meat in bulk?
PROMPT FOR 2ND REASON. 1st Reason ______
2nd Reason ______

e. (i) Do you think there are any disadvantages in freezing red meats?
Yes ( ) No ( ) IF NO Q.7.
(ii) What are they? ______

NON MEAT EATING HOUSEHOLDS ONLY

6. a. Why does your household not eat meat? ______

b. (i) Have you any pet cats or dogs?
Yes ( ) No ( ) IF NO Q.7.
(ii) What do you feed them?
Fresh Meat ( ) Canned Meat ( ) Other ______

7. a. How many people live in your house? ______ number

b. How many are preschool age? ______ number

c. How many are primary school age? ______ number

d. How many people go to work? ______ number

e. What jobs do they do? PROMPT FOR POSITION IN HOUSEHOLD AND WHETHER JOB IS FULL TIME (>30 hours) OR PART TIME (<30 hours)

	Position in House	Part Time

f. Which age group do you belong to: Younger than 25? ( ), 25-34? ( ), 35-49? ( ), 50-64? ( ), Older than 64? ( )
Respondent's address ______ Phone No. ______
Time interview completed ______ date ______ Intervierwer's Signature ______

N.B. (i) THANK RESPONDENT. (ii) CHECK ALL QUESTIONS HAVE BEEN ASKED.

APPENDIX 2

SAMPLE DETAILS

Suburb	Street	Number of Interviews
Addington	Ward Street	16
Avonhead	Gainford Street	15
Bishopdale	Raleigh Street	14
Bryndwer	Matsons Avenue	15
Burnside	Whitby Street	10
Fendalton	Tui Street	14
Hei Hei	Manurere Street	15
Hillsborough	Bradbourne Road	12
Hoon Hay	Mathers Road	15
Hornby	Garvins Road	15
Linwood	Harrow Street	15
Merivale	Hewitts Road	15
Oaklands	Checketts Avenue	14
Papanui	Tomes Road	15
St. Albans	Gossett Street	9
Somerfield	Roker Street	14
Spreydon	Neville Street	16
Riccarton Lower	Maxwell Street/ Peverell Street	23
Richmond	Wardon Street	15
Woolston	Hargood Street	15
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APPENDIX 3

Breakdown of Sample By Composition of Household
By Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Other and Retired	All Households
1-2 occupants	19	20	18	62	119
3-4 occupants	24	31	41	9	105
Over 4 occupants	18	16	22	1	57
All Households	61	67	81	72	281
No children	38	41	39	67	185
Children	23	26	42	5	96
All Households	61	67	81	72	281

(ii) Age	Under 25 Yrs	25-34 Years	35-49 Years	50-64 Years	Over 64 Years	All Households
1-2 occupants	8	9	5	50	50	122
3-4 occupants	16	27	36	25	4	108
Over 4 occupants	1	15	33	9	0	58
All Households	25	51	74	84	54	288
No children	16	11	35	74	54	190
Children	9	40	39	10	0	98
All Households	25	51	74	84	54	288

APPENDIX 4

Regular Consumption[a] of Red Meats by Occupation and Age of Head of Household[b]

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Other and Retired	All Households
	%	%	%	%	%
BEEF					
1-2 occupants	89.5	90.0	88.9	93.5	91.6
3-4 occupants	100.0	100.0	100.0	88.9	99.0
Over 4 occupants	100.0	100.0	95.5	-	98.2
All Households	96.7	97.0	96.3	93.1	95.7
LAMB					
1-2 occupants	84.2	65.0	77.8	69.4	72.3
3-4 occupants	62.5	74.2	75.6	66.7	71.4
Over 4 occupants	61.1	81.3	54.5	-	64.9
All Households	68.9	73.1	70.4	69.4	70.5
HOGGET/MUTTON					
1-2 occupants	36.8	35.0	33.3	54.8	45.4
3-4 occupants	33.3	45.2	36.6	55.6	40.0
Over 4 occupants	55.6	56.3	45.5	-	50.9
All Households	41.0	44.8	38.3	54.2	44.5
PORK					
1-2 occupants	15.8	30.0	33.3	21.0	23.5
3-4 occupants	20.8	29.0	39.0	44.4	32.4
Over 4 occupants	16.7	18.8	27.3	-	22.8
All Households	18.0	26.9	34.6	25.0	26.7
GRILLING STEAK					
1-2 occupants	84.2	70.0	72.2	62.9	68.9
3-4 occupants	87.5	74.2	92.7	66.7	83.8
Over 4 occupants	83.3	81.3	59.1	-	71.9
All Households	85.2	74.6	79.0	62.5	75.1
CASSEROLE STEAK					
1-2 occupants	68.4	70.0	66.7	69.4	68.9
3-4 occupants	87.5	64.5	75.6	66.7	74.3
Over 4 occupants	83.3	93.8	72.7	-	82.5
All Households	80.3	73.1	72.8	69.4	73.7

[a] Regular consumption means served at least every 2 weeks.

[b] For numbers of households in each category see Appendix 3. Percentages have not been computed when there were less than five households in a category.

APPENDIX 4 (Cont'd)

(i) Occupation (Cont'd)	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Other and Retired	All Households
	%	%	%	%	%
ROAST BEEF					
1-2 occupants	36.8	50.0	44.4	41.9	42.9
3-4 occupants	70.8	77.4	87.8	77.8	80.0
Over 4 occupants	72.2	81.3	59.1	-	70.2
All Households	60.7	70.1	70.4	47.2	62.3
LAMB CHOPS					
1-2 occupants	73.7	45.0	72.2	62.9	63.0
3-4 occupants	58.3	74.2	61.0	66.7	64.8
Over 4 occupants	61.1	81.3	45.5	-	61.4
All Households	63.9	67.2	59.3	63.9	63.3
ROAST LAMB					
1-2 occupants	21.1	30.0	38.9	41.9	36.1
3-4 occupants	41.7	41.9	53.7	44.4	46.7
Over 4 occupants	38.9	68.8	36.4	-	47.4
All Households	34.4	44.8	45.7	43.1	42.3
HOGGET/MUTTON CHOPS					
1-2 occupants	31.6	20.0	16.7	45.2	34.5
3-4 occupants	25.0	35.5	34.1	55.6	34.3
Over 4 occupants	38.9	56.3	36.4	-	42.1
All Households	31.1	35.8	30.9	45.8	39.9
ROAST HOGGET/MUTTON					
1-2 occupants	15.8	30.0	22.2	35.5	29.4
3-4 occupants	25.0	35.5	31.7	44.4	32.4
Over 4 occupants	27.8	56.3	27.3	-	35.1
All Households	23.0	38.8	28.4	36.1	31.7
PORK CHOPS					
1-2 occupants	15.8	25.0	27.8	21.0	21.8
3-4 occupants	16.7	25.8	34.1	44.4	28.6
Over 4 occupants	11.1	18.8	22.7	-	19.3
All Households	14.8	23.9	29.6	25.0	23.8
ROAST PORK					
1-2 occupants	15.8	25.0	22.2	8.1	14.3
3-4 occupants	16.7	16.1	17.1	44.4	19.0
Over 4 occupants	5.6	12.5	4.5	-	8.8
All Households	13.1	17.9	14.8	13.9	14.9

APPENDIX 4 (Cont'd)

(ii) Age	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years	All Households
	%	%	%	%	%	%
BEEF						
1-2 occupants	100.0	100.0	100.0	86.0	94.0	91.8
3-4 occupants	93.8	100.0	100.0	100.0	-	99.1
Over 4 occupants	-	100.0	97.0	100.0	-	98.2
All Households	96.0	100.0	98.6	91.7	94.4	95.8
LAMB						
1-2 occupants	100.0	55.6	60.0	78.0	68.0	73.0
3-4 occupants	75.0	74.1	69.4	76.0	-	72.2
Over 4 occupants	-	73.3	60.6	66.7	-	65.5
All Households	84.0	70.6	64.9	76.2	66.7	71.2
HOGGET/MUTTON						
1-2 occupants	37.5	22.2	20.0	44.0	52.0	44.3
3-4 occupants	25.0	25.9	41.7	64.0	-	40.7
Over 4 occupants	-	53.3	45.5	66.7	-	51.7
All Households	32.0	33.3	41.9	52.4	51.9	44.4
PORK						
1-2 occupants	12.5	22.2	20.0	30.0	24.0	25.4
3-4 occupants	18.8	44.4	25.0	44.0	-	34.3
Over 4 occupants	-	26.7	15.2	44.4	-	22.4
All Households	16.0	35.3	20.3	35.7	25.9	28.1
GRILLING STEAK						
1-2 occupants	87.5	77.8	80.0	68.0	64.0	68.9
3-4 occupants	87.5	85.2	91.7	76.0	-	83.3
Over 4 occupants	-	53.3	75.8	88.9	-	72.4
All Households	88.0	74.5	83.8	72.6	61.1	75.0
CASSEROLE STEAK						
1-2 occupants	75.0	77.8	60.0	66.0	68.0	68.0
3-4 occupants	68.8	77.8	66.7	84.0	-	74.1
Over 4 occupants	-	86.7	81.8	77.8	-	82.8
All Households	72.0	80.4	73.0	72.6	68.5	73.3
ROAST BEEF						
1-2 occupants	37.5	66.7	20.0	36.0	50.0	43.4
3-4 occupants	68.8	88.9	80.6	84.0	-	80.6
Over 4 occupants	-	66.7	69.7	77.8	-	70.7
All Households	60.0	78.4	71.6	54.8	50.0	62.8

APPENDIX 4 (Cont'd)

(ii) Age (Cont'd)	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years	All Households
	%	%	%	%	%	%
LAMB CHOPS						
1-2 occupants	100.0	44.4	40.0	66.0	62.0	63.9
3-4 occupants	68.8	66.7	63.9	68.0	-	64.8
Over 4 occupants	-	60.0	60.6	66.7	-	62.1
All Households	80.0	60.8	60.8	66.7	59.3	63.9
ROAST LAMB						
1-2 occupants	25.0	22.2	20.0	44.0	38.0	37.7
3-4 occupants	50.0	44.4	47.2	56.0	-	48.1
Over 4 occupants	-	40.0	48.5	55.6	-	48.3
All Households	44.0	39.2	45.9	48.8	37.0	43.8
HOGGET/MUTTON CHOPS						
1-2 occupants	37.5	0.0	20.0	34.0	40.0	33.6
3-4 occupants	12.5	25.9	30.6	56.0	-	33.3
Over 4 occupants	-	33.3	39.4	66.7	-	43.1
All Households	24.0	23.5	33.8	44.0	40.7	35.4
ROAST HOGGET/MUTTON						
1-2 occupants	0.0	22.2	0.0	30.6	36.0	28.7
3-4 occupants	25.0	22.2	36.1	48.0	-	33.3
Over 4 occupants	-	46.7	30.3	33.3	-	36.2
All Households	20.0	29.4	31.1	35.7	35.2	31.9
PORK CHOPS						
1-2 occupants	12.5	22.2	0.0	30.0	22.0	23.8
3-4 occupants	18.8	33.3	19.4	44.0	-	29.6
Over 4 occupants	-	26.7	12.1	33.3	-	19.0
All Households	16.0	29.4	14.9	34.5	24.1	25.0
ROAST PORK						
1-2 occupants	0.0	22.2	20.0	18.0	16.0	16.4
3-4 occupants	6.3	22.2	11.1	36.0	-	19.4
Over 4 occupants	-	13.3	3.0	22.2	-	8.6
All Households	4.0	19.6	8.1	23.8	16.7	16.6

APPENDIX 5

Preferences for Red Meats

A. Steak and Chops

		%			%
(i)	Grilling Steak	58.8	(ii)	Grilling Steak	58.1
	Lamb Chops	28.0		Pork Chops	31.8
	Undecided	13.1		Undecided	10.0
		100.0			100.0
(iii)	Lamb Chops	52.6			
	Pork Chops	38.4			
	Undecided	9.0			
		100.0			

B. Roast Meats

		%			%
(i)	Roast Beef	37.7	(ii)	Roast Beef	42.9
	Roast Lamb	49.5		Roast Pork	46.0
	Undecided	12.8		Undecided	11.1
		100.0			100.0
(iii)	Roast Lamb	51.6			
	Roast Pork	36.0			
	Undecided	12.5			
		100.0			

Valid Responses 289

[a] The aggregate preferences for steak and chops were derived as follows:

1. If A(i) Grilling Steak and A(ii) Grilling Steak; Preference for Grilling Steak.
2. If A(i) Lamb Chops and A (iii) Lamb Chops; Preference for Lamb Chops.
3. If A(ii) Pork Chops and A (iii) Pork Chops; Preference for Pork Chops.
4. If conditions 1, 2 and 3 do not hold then no definite preference.

The aggregate preferences for roast meats were derived in a similar manner.

APPENDIX 6

Regular Consumption of Other Types of Meat by Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Other and Retired	All Households
	%	%	%	%	%
MINCE					
1-2 occupants	63.2	50.0	55.6	53.2	54.6
3-4 occupants	70.8	71.0	75.6	77.8	73.3
Over 4 occupants	66.7	75.0	72.7	-	71.9
All Households	67.2	65.7	70.4	56.9	65.1
SMALLGOODS					
1-2 occupants	63.2	60.0	61.1	64.5	63.0
3-4 occupants	91.7	67.7	87.8	44.4	79.0
Over 4 occupants	88.9	93.8	81.8	-	87.7
All Households	82.0	71.6	80.2	62.5	74.0
FANCY SMALLGOODS					
1-2 occupants	10.5	0.0	5.6	3.2	4.2
3-4 occupants	8.3	6.5	14.6	0.0	9.5
Over 4 occupants	5.6	0.0	18.2	-	8.8
All Households	8.2	3.0	13.6	2.8	7.1
HAM					
1-2 occupants	21.1	30.0	44.4	27.4	29.4
3-4 occupants	37.5	25.8	34.1	11.1	30.5
Over 4 occupants	5.6	25.0	31.8	-	22.8
All Households	23.0	26.9	35.8	26.4	28.5
BACON					
1-2 occupants	52.6	70.0	55.6	51.6	55.5
3-4 occupants	66.7	58.1	75.6	55.6	66.7
Over 4 occupants	66.7	43.8	68.2	-	61.4
All Households	62.3	58.2	69.1	52.8	60.9
EDIBLE OFFAL					
1-2 occupants	15.8	25.0	11.1	14.5	16.0
3-4 occupants	37.5	29.0	29.3	11.1	29.5
Over 4 occupants	16.7	25.0	13.6	-	17.5
All Households	24.6	26.9	21.0	13.9	21.4

APPENDIX 6 (Cont'd)

(i) Occupation Cont'd	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Other and Retired	All Households
	%	%	%	%	%
POULTRY					
1-2 occupants	63.2	45.0	50.0	45.2	48.7
3-4 occupants	54.2	58.1	53.7	66.7	56.2
Over 4 occupants	38.9	68.8	63.6	-	56.1
All Households	52.5	56.7	55.6	47.2	53.0
FISH					
1-2 occupants	73.7	55.0	66.7	51.6	58.0
3-4 occupants	83.3	58.1	63.4	33.3	63.8
Over 4 occupants	72.2	50.0	50.0	-	57.9
All Households	77.0	55.2	60.5	50.0	60.1

(ii) Age	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years	All Households
	%	%	%	%	%	%
MINCE						
1-2 occupants	75.0	55.6	60.0	52.0	54.0	54.9
3-4 occupants	75.0	63.0	75.0	84.0	-	72.2
Over 4 occupants	-	80.0	60.6	88.9	-	70.7
All Households	76.0	66.7	67.6	65.5	51.9	64.6
SMALLGOODS						
1-2 occupants	75.0	77.8	40.0	64.0	60.0	63.1
3-4 occupants	81.3	88.9	80.6	72.0	-	78.7
Over 4 occupants	-	93.3	84.8	88.9	-	87.9
All Households	80.0	88.2	79.7	69.0	57.4	74.0
FANCY SMALLGOODS						
1-2 occupants	0.0	0.0	40.0	6.0	0.0	4.1
3-4 occupants	0.0	18.5	13.9	0.0	-	9.3
Over 4 occupants	-	6.7	9.1	11.1	-	8.6
All Households	0.0	11.8	13.5	4.8	0.0	6.9
HAM						
1-2 occupants	0.0	33.3	40.0	34.0	28.0	29.5
3-4 occupants	12.5	11.1	47.2	36.0	-	30.6
Over 4 occupants	-	26.7	21.2	33.3	-	24.1
All Households	8.0	19.6	35.1	34.5	29.6	28.8

APPENDIX 6 (Cont'd)

(ii) Age cont'd	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years	All Households
	%	%	%	%	%	%
BACON						
1-2 occupants	62.5	33.3	40.0	60.0	56.0	55.7
3-4 occupants	56.3	63.0	75.0	68.0	-	66.7
Over 4 occupants	-	46.7	63.6	66.7	-	60.3
All HOuseholds	60.0	52.9	67.6	63.1	55.6	60.8
EDIBLE OFFAL						
1-2 occupants	12.5	11.1	0.0	16.0	18.0	15.6
3-4 occupants	6.3	44.4	30.6	28.0	-	28.7
Over 4 occupants	-	20.0	21.2	0.0	-	17.2
All Households	8.0	31.4	24.3	19.9	16.7	20.8
POULTRY						
1-2 occupants	37.5	66.7	60.0	56.0	42.0	50.0
3-4 occupants	37.5	51.9	69.4	56.0	-	57.4
Over 4 occupants	-	66.7	51.5	55.6	-	56.9
All Households	40.0	58.8	60.8	56.0	44.4	54.2
FISH						
1-2 occupants	50.0	88.9	40.0	64.0	52.0	59.0
3-4 occupants	75.0	55.6	72.2	60.0	-	64.8
Over 4 occupants	-	55.3	51.5	88.9	-	58.6
All Households	68.0	60.8	60.8	65.5	51.9	61.1

APPENDIX 7

Changes in Meat Consumption by Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Other and Retired
	%	%	%	%
1-2 occupants	15.8	15.0	11.1	4.8
3-4 occupants	20.8	12.9	29.3	33.3
Over 4 occupants	44.4	31.3	4.5	-
All Households	26.2	17.9	18.5	8.3

(ii) Age	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
	%	%	%	%	%
1-2 occupants	37.5	22.2	0.0	6.0	6.0
3-4 occupants	37.5	22.2	22.2	12.0	-
Over 4 occupants	0.0	20.0	24.2	33.3	-
All Households	36.0	21.6	21.6	10.7	7.4

APPENDIX 8

Average Per Capita Expenditure on Meat By Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Retired and Other
RED MEATS				
Households with:				
No Children				
1-2 occupants	$2.87(18)[a]	$2.71(17)	$3.22(18)	$2.52(54)
3-4 occupants	$2.39(13)	$2.29(19)	$2.98(13)	$3.04 (4)
Over 4 occupants	$2.04 (6)	$1.63 (2)	$1.97 (8)	-
Children				
3-4 occupants	$1.57(11)	$1.85 (9)	$2.56(26)	$2.56 (4)
Over 4 occupants	$1.87(11)	$1.54(11)	$1.67(14)	-
All Households	$2.20(59)	$2.55(62)	$2.38(79)	$2.55(63)
OTHER TYPES OF MEATS				
Households with:				
No Children				
1-2 occupants	$0.90(16)	$1.26(14)	$1.22(18)	$1.54(45)
3-4 occupants	$0.85(11)	$0.56(15)	$1.12(10)	$0.56 (4)
Over 4 occupants	$0.58 (5)	$0.29 (2)	$0.88 (8)	-
Children				
3-4 occupants	$0.81(11)	$0.80 (7)	$0.64(25)	$0.69 (4)
Over 4 occupants	$0.66(11)	$0.60(11)	$0.50(13)	-
All Households	$0.80(54)	$0.75(50)	$0.85(74)	$1.37(54)
ALL MEATS				
Households with:				
No Children				
1-2 occupants	$3.51(16)	$5.23(14)	$4.44(18)	$4.20(45)
3-4 occupants	$3.11(11)	$2.83(15)	$4.21(10)	$3.60 (4)
Over 4 occupants	$2.70 (5)	$1.92 (2)	$2.84 (8)	-
Children				
3-4 occupants	$2.38(11)	$3.11 (7)	$2.48(25)	$3.25 (4)
Over 4 occupants	$2.54(11)	$2.14(11)	$2.24(13)	-
All Households	$2.93(54)	$3.43(50)	$3.19(74)	$4.06(54)

[a] The numbers in brackets are the number of households in a particular occupation or age group. Averages have not been computed where there was only one household.

APPENDIX 8 (Cont'd)

(ii) Age	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
RED MEATS					
Households with:					
No Children					
1-2 occupants	$2.45 (8)	$3.14 (7)	$3.45 (5)	$3.15(46)	$2.52(44)
3-4 occupants	$2.39 (8)	$1.56 (2)	$2.66(21)	$2.75(17)	$2.89 (3)
Over 4 occupants	-	$2.51 (2)	$1.82 (9)	$1.97 (6)	-
Children					
3-4 occupants	$1.10 (7)	$1.89(24)	$2.10(14)	$2.43 (6)	-
Over 4 occupants	-	$1.41(13)	$1.82(23)	$1.76 (3)	-
All Households	$2.02(24)	$2.02(49)	$2.23(72)	$2.87(78)	$2.53(47)
OTHER TYPES OF MEATS					
Households with:					
No Children					
1-2 occupants	$0.91 (8)	$1.14 (7)	$1.15 (5)	$1.74(42)	$0.88(34)
3-4 occupants	$0.74 (6)	$0.50 (2)	$0.88(16)	$0.81(15)	$0.56 (3)
Over 4 occupants	-	$0.64 (2)	$0.69 (8)	$0.68 (6)	-
Children					
3-4 occupants	$0.60 (7)	$0.72(24)	$0.80(13)	$0.52 (4)	-
Over 4 occupants	-	$0.48(10)	$0.56(23)	$1.04 (3)	-
All Households	$0.76(21)	$0.74(46)	$0.74(65)	$1.37(70)	$0.86(37)
ALL MEATS					
Households with:					
No Children					
1-2 occupants	$3.38 (8)	$4.29 (7)	$4.60 (5)	$4.97(42)	$3.50(34)
3-4 occupants	$3.13 (6)	$2.06 (2)	$3.57(16)	$3.52(15)	$3.44 (3)
Over 4 occupants	-	$3.16 (2)	$2.53 (8)	$2.66 (6)	-
Children					
3-4 occupants	$1.69 (7)	$2.61(24)	$2.92(13)	$3.23 (4)	-
Over 4 occupants	-	$1.97(10)	$2.37(23)	$2.80 (3)	-
All Households	$2.74(21)	$2.81(46)	$2.95(65)	$4.31(70)	$3.50(37)

APPENDIX 9

Outlet Used to Buy Red Meat by Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Retired and Other
	%	%	%	%
Private Butcher	34.4	56.7	35.8	43.7
Chain Butcher	19.7	9.0	17.3	7.0
Supermarket	21.3	23.9	27.2	23.9
Butcher and Supermarket	21.3	4.5	9.9	19.7
Other	3.3	6.0	9.9	5.6
	100.0	100.0	100.0	100.0
Valid Responses	61	67	81	71

(ii) Age	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
	%	%	%	%	%
Private Butcher	32.0	35.3	36.5	50.6	48.1
Chain Butcher	12.0	19.6	16.2	8.4	9.3
Supermarket	32.0	23.5	29.7	20.5	20.4
Butcher and Supermarket	16.0	11.8	8.1	15.7	18.5
Other	8.0	9.8	9.5	4.8	3.7
	100.0	100.0	100.0	100.0	100.0
Valid Responses	25	51	74	83	54

APPENDIX 10

Outlet Used to Buy Red Meats by Suburb

Suburb	Private Butcher	Chain Butcher	Super-market	Butcher and Super-market	Other	Valid Response
	%	%	%	%	%	
Addington (Ward St)	68.8	12.5	12.5	0.0	6.3	16
Avonhead (Gainford St)	33.3	6.7	46.7	6.7	6.7	15
Bishopdale (Raleigh St)	21.4	14.3	50.0	7.1	7.1	14
Bryndwer (Matson Ave)	20.0	6.7	13.3	33.3	26.7	15
Burnside (Whitby St)	40.0	40.0	10.0	10.0	0.0	10
Fendalton (Tui St)	30.8	7.7	7.7	53.8	0.0	13
Hei Hei (Manurere St)	46.7	0.0	33.3	20.0	0.0	15
Hillsborough (Bradbourne Rd)	50.0	0.0	25.0	8.3	16.7	12
Hoon Hay (Mathers Rd)	40.0	13.3	20.0	20.0	6.7	15
Hornby (Garvins Rd)	20.0	13.3	46.7	6.7	13.3	15
Linwood (Harrow St)	40.0	20.0	20.0	13.3	6.7	15
Merivale (Hewitts Rd)	40.0	33.3	20.0	6.7	0.0	15
Oaklands (Checkletts Ave)	64.3	0.0	21.4	14.3	0.0	14
Papanui (Tones Rd)	64.3	7.1	14.3	14.3	0.0	14
St.Albans (Gasset St)	44.4	0.0	11.1	44.4	0.0	9
Somerfield (Roker St)	57.1	21.4	7.1	14.3	0.0	14
Spreydon (Neville St)	37.5	12.5	18.8	25.0	6.3	16
Riccarton Lower (Maxwell St Peverell St)	40.9	13.6	18.2	4.5	22.7	22
Richmond (Warden St)	42.9	21.4	14.3	21.4	0.0	14
Woolston (Hargood St)	6.7	46.7	26.7	13.3	6.7	15
All Households	41.9	12.8	24.6	13.5	7.2	288

Note: Percentages are expressed as row percentages, not column percentages.

APPENDIX 11

Households with Deep Freezers by Occupation and Age of Head of Household

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Retired and Other
(a) 1-2 Occupants	%	%	%	%
Chest Freezer	57.9	25.0	61.1	29.0
Refrig/Freezer	26.3	60.0	22.2	56.5
No Freezer	15.8	15.0	16.7	14.5
	100.0	100.0	100.0	100.0
Valid Responses	19	20	18	62
(b) 3-4 Occupants				
Chest Freezer	54.2	61.3	61.0	66.7
Refrig/Freezer	41.7	32.3	34.1	33.3
No Freezer	4.2	6.5	4.9	0.0
	100.0	100.0	100.0	100.0
Valid Responses	24	31	41	9
(c) Over 4 Occupants				
Chest Freezer	50.0	68.8	72.7	-
Refrig/Freezer	44.4	31.3	22.7	-
No Freezer	5.6	0.0	4.5	-
	100.0	100.0	100.0	-
Valid Responses	18	16	22	-
(d) All Households				
Chest Freezer	54.1	52.2	64.2	33.3
Refrig/Freezer	37.7	40.3	28.4	54.2
No Freezer	8.2	7.5	7.4	12.5
	100.0	100.0	100.0	100.0
Valid Responses	61	67	81	72

APPENDIX 11 (Cont'd)

(ii) Age	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
	%	%	%	%	%
(a) 1-2 Occupants					
Chest Freezer	37.5	44.4	60.0	42.0	34.0
Refrig/Freezer	37.5	33.3	40.0	48.0	48.0
No Freezer	25.0	22.2	0.0	10.0	18.0
	100.0	100.0	100.0	100.0	100.0
Valid Responses	8	9	5	50	50
(b) 3-4 Occupants					
Chest Freezer	50.0	59.3	55.6	68.0	-
Refrig/Freezer	50.0	29.6	38.6	28.0	-
No Freezer	0.0	11.1	5.6	4.0	-
	100.0	100.0	100.0	100.0	
Valid Responses	16	27	36	25	-
(c) Over 4 Occupants					
Chest Freezer	-	80.0	66.7	11.1	-
Refrig/Freezer	-	13.3	33.3	77.8	-
No Freezer	-	6.7	0.0	11.1	-
		100.0	100.0	100.0	
Valid Responses	-	15	33	9	-
(d) All Households					
Chest Freezer	48.0	62.7	60.8	46.4	37.0
Refrig/Freezer	44.0	25.5	36.5	45.2	46.3
No Freezer	8.0	11.8	2.7	8.3	16.7
	100.0	100.0	100.0	100.0	100.0
Valid Responses	25	51	74	84	54

APPENDIX 12

Households Buying Meat in Bulk by Occupation and Age of Head of Household[a]

(i) Occupation	Professional and Managerial	Clerical Sales and Service	Tradesman and Labourer	Other and Retired
	%	%	%	%
1-2 occupants	36.8	25.0	44.4	29.0
3-4 occupants	66.7	58.1	75.6	77.8
Over 4 occupants	44.0	62.5	59.1	-
All Households	50.8	49.3	64.2	34.7

(ii) Age	Under 25 Years	25-34 Years	35-49 Years	50-64 Years	Over 64 Years
	%	%	%	%	%
1-2 occupants	50.0	22.2	40.0	36.0	30.0
3-4 occupants	62.5	77.8	69.4	60.0	-
Over 4 occupants	100.0	66.7	60.6	11.1	-
All Households	60.0	64.7	63.5	40.5	33.3

[a]For numbers of households in each category see Appendix 3.

APPENDIX 13

New Zealand Meat Consumption

(i) Estimated Total Consumption - Red Meats (Tonnes 000)

Year Ending 30 Sept	Beef & Veal	Lamb	Mutton	Pig Meats	Offal	Total
1970	132.1	26.8	86.8	38.6	14.6	298.9
1971	133.1	28.8	88.9	40.6	16.9	308.3
1972	135.7	33.5	95.4	42.4	16.7	323.7
1973	145.2	37.1	89.5	35.2	16.8	323.8
1974	144.7	32.2	84.2	33.0	14.3	308.4
1975	164.4	37.2	78.7	35.8	15.7	331.8
1976	174.5	37.6	66.5	35.1	17.3	331.0

Source: Monthly Abstract of Statistics, June 1977 p.26.

(ii) Estimated Per Capita Consumption - Red Meats (Kilos)

Year Ending 30 Sept	Beef & Veal	Lamb	Mutton	Pig Meats	Offal	Total
1970	47	10	31	14	5	107
1971	46	10	31	14	6	107
1972	46	12	32	15	6	111
1973	49	13	30	12	6	109
1974	48	11	28	11	5	102
1975	53	12	26	12	5	108
1976	56	12	21	11	6	106

Source: Derived from Total Consumption using Population Figures for 31 March (Monthly Abstracts, June 1977 p.5)

(iii) Estimated Per Capita Consumption of White Meats (Kilos)

Year Ending 31 Dec	Poultry	Fish
1970	5	6
1971	5	7
1972	7	5
1973	7	5
1974	10	5
1975	9	6

Source: New Zealand Official Year Book 1976 p.669
Department of Statistics and Food Balance Sheet 1975, Supplement to January-February 1977, Monthly Abstract of Statistics.

APPENDIX 14

New Zealand Retail Meat Prices

	Annual Averages - weighted average over 25 Centres in New Zealand (cents/kg)								
	1970	1971	1972	1973	1974	1975	1976	% Change 1970-76	April 1977
Beef: Rump Steak	159	169	184	229	230	218	247	55.3	267
Blade Steak	124	135	146	184	177	161	182	46.8	200
Prime Rib	117	126	137	171	164	146	166	41.9	181
Corned Silverside	125	135	147	186	182	168	191	52.8	210
Hogget: Mid Loin Chops	92	96	100	122	137	141	178	93.5	199
Forequarter	54	55	56	75	85	112	126	133.3	125
Leg	93	97	102	124	141	143	178	91.4	196
Pork: Loin Chops	127	132	140	188	215	228	260	104.7	274
Leg	124	128	137	184	210	224	256	106.5	267
Sausages: Beef	56	59	64	81	93	95	101	80.4	113
Mince: Beef	96	101	106	133	131	110	126	31.3	140
Ham Cooked	248	284	301	377	429	479	561	126.2	551
Bacon Rashers	174	180	196	267	308	345	392	125.3	412
Fish: Fresh Fillets	109	120	128	145	182	209	253	132.1	281

NOTE:

The above figures are national averages whilst the survey was conducted solely in Christchurch. Confidentiality requirements of the Department of Statistics prevents publication of the specific Christchurch prices that form part of the national figure. However, as an approximate guide, Christchurch average beef and hogget prices have recently been 10 to 20 percent lower than the national average prices, whereas for pork and other processed meats, Christchurch prices were similar to national figures.

SOURCES:

Price Wages and Labour 1975, p. 37, Department of Statistics Publication and personal communication with the Department of Statistics.

APPENDIX 15

Christchurch Wholesale and Retail Meat Prices
April/May 1977

(i) Wholesale Price Associated Meat Buyers Ltd. (April 11 to May 29)

(carcase prices - cents/kilo)

Beef:	Prime Ox	62
	Prime Heifer	60
	Cows	50
	Veal	59
Lamb:	Under 12.5 Kg	100
	13 - 16 Kg	94
	16.5 - 19 Kg	85
Hogget:	Double Stripe: Under 19 Kg	88
	19.5 - 21.5 Kg	82
	22.0 - 22.5 Kg	76
	Single Red Stripe: Under 21.5 Kg	64
Ewes:	All Weights	55
Pork:	Fresh Prime Under 36.5 Kg	147
	37 - 41 Kg	145
	41.5 - 45 Kg	140.5
	Fresh Choice Under 36.5 Kg	138.5
	36 - 41 Kg	136
	41.5 - 45 Kg	132
	Baconer Prime 45.5 - 55 Kg	130.5
	Over 55.5 Kg	126
	Baconer Choice 45.5 - 55 Kg	121.0
	Over 55.5 Kg	117.0

(For head off, 7c per kilo extra on all pigs)

APPENDIX 15 (Cont'd)

(ii) Retail Prices

	Lowest Advertised Retail Price[a] cents/Kg	Average Retail Price[b] cents/Kg
Beef: Porterhouse Steak	209	280
Rump Steak	174	250
Stewing Steak	99	140
Prime Rib	108	180
Topside	147	190
Corned Silverside	174	185
Lamb and Hogget:		
Sides	6.99 each	-
Legs	3.59 each	220
Fores	2.69 each	130
Chops	195	220
Pork: Slices	196	-
Pieces	297	-
Chops	275	285
Legs	275	280
Sausages: Beef	99	115
Mince: Beef	99	105
Bacon:	310	410

[a] Based on supermarket and chain butcher prices advertised in the local newspapers and by mail advertising. There were also a large number of discounts offered for bulk purchases e.g. M.M.M. offered a 10% discount for 10 lb. purchases of the different cuts of beef.

[b] Estimates of the average prices are based on data supplied by the trade and the Department of Statistics.

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